# Written Management Plans

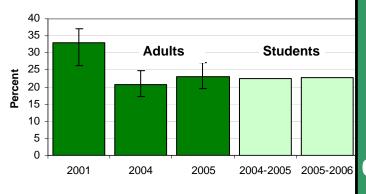
With only 1 in 5 Vermonters with asthma on a written asthma management plan, programs must work to increase use and awareness of the importance of these plans among both adults and youth.

The National Heart, Lung, and Blood Institute recommends that seeing a physician for regular check-ups, using medications as directed by a doctor, and following an asthma action plan prescribed by a doctor can prevent or decrease asthma symptoms. (source: National Heart, Lung, and Blood Institute).

Adults: Use of written asthma management plans has decreased significantly among adult Vermonters from 32.9% in 2001 to 23.1% in 2005 (Figure 13).

Youth: The Department of Education also collected data on use of the Vermont Asthma Action Plan (VAAP) in schools. School nurses reported similar rates of use of asthma management plans (22.9%) among their students compared to the rate observed among adults. There was no change from the rate of use among students from the 2004-2005 school year.

Figure 11. Asthma self-management plan use - Vermont residents with asthma, 2001, 2004-2006.



Of the 17 schools assessed with VCHIP's Provider-School Nurse Coordination Project. 35% reported all of their students with asthma were on written management plans and 50% had a system in place to obtain an updated management plan annually.

#### **DATA TABLES**

Table 12. Asthma self-management plan use – Vermont residents with asthma, 2001, 2004-2006.

	2001	2004	2005	2004-2005	2005-2006
	<u>% (95% CI)</u>	<u>% (95% CI)</u>	<u>% (95% CI)</u>	<u>%</u>	<u>%</u>
Written asthma plan – adults*	32.9 (27.9-38.2)	20.7 (17.2-24.8)	23.1 (19.5-27.2)		
Written asthma plan – students**				22.6	22.9

Data sources: BRFSS (adults) and Department of Education, School Nurse Survey (students) BRFSS: Age-adjusted rates, School Nurse Survey: Crude rates

<sup>\*</sup>Respondents indicated they and their doctor or other health care provider had worked out a written plan for taking care of their asthma in the past 12 months (written asthma plans can include information about medicines, asthma triggers, and what to do when you have an attack).

# Routine Care Visits and Asthma Education

With less than half of Vermonters with asthma visiting their physician for routine care in the past year, physicians, other health care professionals, and patients must be educated on the importance of routine care visits for persons with asthma.

The National Heart, Lung, and Blood Institute recommends that **seeing a physician for regular check-ups**, using medications as directed by a doctor, and following an asthma action plan prescribed by a doctor can prevent or decrease asthma symptoms. (source: National Heart, Lung, and Blood Institute).

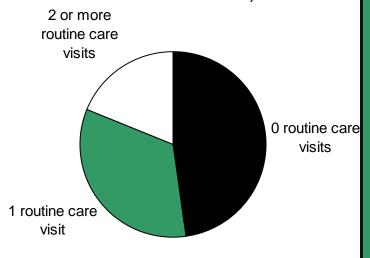
### **Routine Care Visits**

**Adults:** Almost half of Vermonters with asthma did not see a physician for a routine care visit in the past year (Figure 14).

## **Asthma Education**

Asthma: The BRFSS collected data on whether the doctor, nurse, or other health professional of a Vermonter with asthma had talked with them about how to recognize early signs and symptoms of asthma attacks and how to respond to them. In 2005, only 38.6% (33.8-43.5) of people with asthma had received physician education in the past 12 months.

Figure 12. Frequency of routine care visits in past year for asthma - Vermont adult residents with current asthma, 2005.



**Youth:** Of the 17 schools assessed with VCHIP's Provider-School Nurse Coordination Project, 73% of school nurses reported providing education to their students with asthma, 35% of schools teach asthma awareness and lung health education as part of the health education curriculum, 24% of parents of students with asthma participated in asthma education programs, and 19% of school staff received education on asthma.

#### DATA TABLES

Table 13. Frequency of routine care visits in past year for asthma - Vermont adult residents with current asthma, 2005.

	0 routine care visits	1 routine care visit	2 or more routine care visits
	<u>% (95% CI)</u>	<u>% (95% CI)</u>	<u>% (95% CI)</u>
2002	42.3 (36.7-48.2)	34.6 (29.1-40.5)	23.1 (18.4-28.5)
2003	48.2 (41.8-54.8)	34.0 (28.1-40.5)	17.8 (13.9-22.5)
2004	49.1 (44.1-54.0)	30.9 (26.7-35.5)	20.0 (16.5-24.1)
2005	47.8 (42.5-53.2)	33.2% (27.8-39.0)	19.0 (15.8-22.7)

Data source: BRFSS, Crude rates

2/12/2007 Page 20

# Medication Use

With only 1 in 4 Vermonters with asthma taking daily maintenance medication, it is crucial to increase physician and patient education on the importance of use of appropriate daily medication for long-term control of persistent asthma.

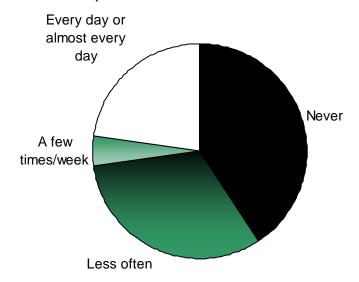
The National Asthma Education Prevention Program Guidelines recommend **daily medication** for long-term control of persistent asthma among adults. (source: NAEPP Expert Panel Report Guidelines for the Diagnosis and Management of Asthma-Update on Selected Topics).

#### **Adults**

Among Vermonters with current asthma in 2005, when asked if they had used asthma medication in the past 30 days to prevent an asthma attack, 40.6% had never used medication, 36.0% used medication occasionally, and 22.7% took asthma medication daily or almost every day.

Those reporting asthma medication use less than once per day may represent those using rescue medication only, meaning medication they need during an asthma attack. Vermonters reporting that they used asthma medication one or more times a day may represent those that have been prescribed maintenance medication for their asthma by a physician.

Figure 13. Frequency of asthma medication used to prevent as asthma attack in past 30 days – Vermont adult residents with current asthma, 2005.



## Youth

Of the 17 schools assessed with VCHIP's Provider-School Nurse Coordination Project, 71% have a written policy allowing children to take asthma medications at school and 83% of these policies specify that children may carry and administer their own medication.

# **DATA TABLES**

Table 14. Frequency of asthma medication used to prevent as asthma attack in past 30 days – Vermont adult residents with current asthma, 2002-2004.

	None	Less than once/week	Once or twice/week	More than twice/week	Once every day	Two or more times/day
	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	<u>% (95% CI)</u>
2002	31.4	11.1	13.2	5.7	16.2	22.4
2003	30.6	12.7	11.2	8.4	17.5	19.7
2004	29.3	10.9	9.8	5.5	20.2	24.3

Data source: BRFSS, Crude rates

# **Immunizations**

Although rates of immunization are higher among those with asthma compared to the rest of the population, there are still a substantial number of Vermonters with asthma who are not receiving the proper immunizations. Asthma and immunization programs should work together to promote messaging on the importance of vaccinations in persons with asthma and other chronic conditions.

The Centers for Disease Control and Prevention (CDC) recommend that people with chronic health conditions including asthma, as well as those age 65 and over, get a pneumococcal vaccination; the recommendation for an annual flu shot is for those with a chronic condition and all adults 50 and older. (Source: CDC).

# Influenza vaccination

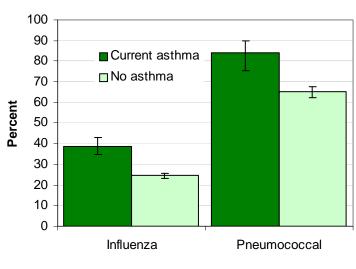
**Adults:** Vermont adults with asthma are statistically more likely to get a flu shot each year than those without asthma (38.7% versus 24.4%).

Youth: Vermont youth (under 18) with asthma are also statistically more likely to get a flu shot than those without asthma (41.3% versus 13.7%).

## Pneumonia vaccination

**Adults:** Vermonters with asthma are statistically more likely to have ever had a pneumococcal vaccination (83.9% versus 65.2%).

Figure 14. Immunization for influenza and pneumonia by asthma status - Vermont adult residents, 2005.



Vaccination type

# **DATA TABLES**

Table 15. Immunization for influenza and pneumonia by asthma status - Vermont adult residents, 2005.

	Flu shot in past year		Ever had pneumococcal vaccine		
	With asthma	Without asthma	With asthma	Without asthma	
	<u>% (95% CI)</u>	<u>% (95% CI)</u>	<u>% (95% CI)</u>	<u>% (95% CI)</u>	
Adults	38.7 (34.7-42.9)	24.4 (23.2-25.5)	83.9 (75.6-89.8)	65.2 (62.5-67.8)	
Youth	41.3% (32.5-50.7)	13.7% (11.9-15.7)			

Data source: BRFSS, Age-adjusted rates